APPENDIX A

HERBICIDE TREATMENT MITIGATION MEASURES, PREVENTION MEASURES, STANDARD OPERATING PROCEDURES AND BLM TREATMENT MEASURES (Source: BLM Vegetation Treatment PEIS)

Table A-1 – Vegetation Treatment PEIS Mitigation Measures

Table A-2 – Vegetation Treatment PEIS Prevention Measures

Table A-3 – Vegetation Treatment PEIS Standard Operating Procedures for Applying Herbicides

A-4 List – BLM Treatment Measures

TABLE A-1 Vegetation Treatment PEIS Mitigation Measures

The following mitigation measures are taken from the *BLM Vegetation Treatments Using Herbicides in 17 Western States, Programmatic Environmental Impact Statement* (Vegetation Treatment PEIS). Other measures in the Vegetation Treatment PEIS were removed as they were determined to not be applicable to the (Sunrise Powerlink) SRPL project because (1) the herbicide is not proposed for use; (2) the herbicide application method will not be used; (3) the resource is not present within impact area s; or (4) the current project phase of development (i.e., operation and maintenance) precludes the relevance of the measure.

Resource	Mitigation Measure
Air Quality	• None proposed.
Soil Resources	• None proposed.
Water Resources and Quality	• Establish appropriate (herbicide-specific) buffer zones to downstream water bodies, habitats, and species/populations of interest (see Appendix C of Programmatic Environmental Impact Statement [PEIS], Table C-16).
Wetland and Riparian Areas	• See mitigation for Water Resources and Quality and Vegetation.
Vegetation	• Minimize the use of terrestrial herbicides (especially Bromacil, Diuron, and Sulfometuron methyl) in watersheds with downgradient ponds and streams if potential impacts to aquatic plants are identified. • Establish appropriate (herbicide-specific) buffer zones (see Tables 4-12 and 4-14 in Chapter 4 of the Final PEIS) around downstream water bodies, habitats, and species/populations of interest. Consult the ecological risk assessments (ERAs) prepared for the PEIS for more specific information on appropriate buffer distances under different soil, moisture, vegetation, and application scenarios. • To protect special-status plant species, implement all conservation measures for plants presented in the *Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Biological Assessment*.
Wildlife	• To minimize risks to terrestrial wildlife, do not exceed the typical application rate for applications of Glyphosate, or Triclopyr where feasible. • Where practical, limit Glyphosate to spot applications in rangeland and wildlife habitat areas to avoid contamination of wildlife food items. • Avoid using the adjuvant R-11® in aquatic environments, and either avoid using Glyphosate formulations containing polyoxyethyleneamine (POEA), or seek to use formulations with the least amount of POEA, to reduce risks to amphibians. • To protect special-status wildlife species, implement all conservation measures for terrestrial animals presented in the *Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Biological Assessment*.
Cultural Resources	• Do not exceed the typical application rate when applying Triclopyr in known traditional use areas.
Visual Resources	• None proposed.

TABLE A-1 Vegetation Treatment PEIS Mitigation Measures (Cont.)

Resource	Mitigation Measure
Wilderness and Other Special Areas	• Mitigation measures that may apply to wilderness and other special area resources are associated with human and ecological health and recreation (see mitigation measures for Vegetation, Fish and Other Aquatic Resources, Wildlife Resources, Recreation, and Human Health and Safety).
Recreation	• Mitigation measures that may apply to recreational resources are associated with human and ecological health (see mitigation measures for Vegetation, Fish and Other Aquatic Resources, Wildlife Resources, and Human Health and Safety).
Social and Economic Values	• None proposed.
Human Health and Safety	• Use the typical application rate, where feasible, when applying Triclopyr to reduce risk to occupational and public receptors.

TABLE A-2 Vegetation Treatment Prevention Measures

BLM Activity	Prevention Measure
Project Development	• Minimize soil disturbance to the extent practical, consistent with project objectives. • Avoid creating soil conditions that promote weed germination and establishment. • To prevent weed germination and establishment, retain native vegetation in and around project activity areas and keep soil disturbance to a minimum, consistent with project objectives. • Survey the area where material from treated weed-infested sources is used for at least 3 years after project completion to ensure that any weeds transported to the site are promptly detected and controlled. • Prevent weed establishment by not driving through weed-infested areas. • Inspect and document weed establishment at access roads, cleaning sites, and all disturbed areas; control infestations to prevent weed spread within the project area. • Clean equipment before entering public lands. • Ensure that rental equipment is free of weed seed. • Inspect, remove, and properly dispose of weed seed and plant parts found on workers' clothing and equipment. Proper disposal entails bagging the seeds and plant parts and incinerating them.
Revegetation	• Revegetate disturbed soil (except travel ways on surfaced projects) in a manner that optimizes plant establishment for each specific project site. For each project, define what constitutes disturbed soil and objectives for plant cover revegetation. Revegetation may include topsoil replacement, planting, seeding, fertilization, liming, and weed-free mulching, as necessary. • Inspect seed and straw mulch to be used for site rehabilitation (for wattles, straw bales, dams, etc.) and certify that they are free of weed seed and propagules. • Inspect and document all limited term ground-disturbing operations in noxious weed infested areas for at least 3 growing seasons following completion of the project. • Use native material where appropriate and feasible. Use certified weed-free or weed-seed-free hay or straw where certified materials are required and/or are reasonably available. • Evaluate options, including closure, to regulate the flow of traffic on sites where desired vegetation needs to be established. Sites could include road and trail rights-of-way (ROWs), and other areas of disturbed soils.

TABLE A-3 Vegetation Treatment
Standard Operating Procedures for Applying Herbicides

The following Standard Operating Procedures (SOPs) are taken from the *BLM Vegetation Treatments Using Herbicides in 17 Western States, Programmatic Environmental Impact Statement* (Vegetation Treatment PEIS). Other measures in the Vegetation Treatment PEIS were removed as they were determined to not be applicable to the Sunrise Powerlink (SRPL) project because (1) the herbicide is not proposed for use; (2) the herbicide application method will not be used; (3) the resource is not present within impact areas; or (4) the current project phase of development (i.e., operation and maintenance) precludes the relevance of the measure.

Resource Element	Standard Operating Procedure
Guidance Documents	• Bureau of Land Management (BLM) Handbook H-9011-1 (*Chemical Pest Control*); and manuals 1112 (*Safety*), 9011 (*Chemical Pest Control*), 9012 (*Expenditure of Rangeland Insect Pest Control Funds*), 9015 (*Integrated Weed Management)*, and 9220 (*Integrated Pest Management*).
General	• Prepare operational and spill contingency plan in advance of treatment. • Conduct a pretreatment survey before applying herbicides. • Select herbicide that is least damaging to the environment while providing the desired results. • Select herbicide products carefully to minimize additional impacts from degradates, adjuvants, inert ingredients, and tank mixtures. • Apply the least amount of herbicide needed to achieve the desired result. • Follow herbicide product label for use and storage. • Have licensed applicators apply herbicides. • Use only U.S. Environmental Protection Agency-approved herbicides and follow product label directions and “advisory” statements. • Review, understand, and conform to the “Environmental Hazards” section on the herbicide product label. This section warns of known pesticide risks to the environment and provides practical ways to avoid harm to organisms or to the environment. • Consider surrounding land use before assigning aerial spraying as a treatment method and avoid aerial spraying near agricultural or densely populated areas. • Minimize the size of application area, when feasible. • Comply with herbicide-free buffer zones to ensure that drift will not affect crops or nearby residents/landowners. • Post treated areas and specify reentry or rest times, if appropriate. • Keep a copy of Material Safety Data Sheets (MSDSs) at work sites. MSDSs are available for review at http://www.cdms.net/. • Keep records of each application, including the active ingredient, formulation, application rate, date, time, and location. • Avoid accidental direct spray and spill conditions to minimize risks to resources.

TABLE A-3 Vegetation Treatment
Standard Operating Procedures for Applying Herbicides (Contd.)

Resource Element	Standard Operating Procedure
General (Cont.)	• Take precautions to minimize drift by not applying herbicides when winds exceed >10 miles per hour (mph) (>6 mph for aerial applications), or a serious rainfall event is imminent. • Use drift control agents and low volatile formulations. • Conduct pre-treatment surveys for sensitive habitat and special-status species within or adjacent to proposed treatment areas. • Consider site characteristics, environmental conditions, and application equipment in order to minimize damage to non-target vegetation. • Use drift reduction agents, as appropriate, to reduce the drift hazard to non-target species. • Refer to the herbicide product label when planning revegetation to ensure that subsequent vegetation would not be injured following application of the herbicide. • Clean off-highway vehicles (OHVs) to remove seeds.
Air Quality See Manual 7000 (*Soil, Water, and Air Management*)	• Consider the effects of wind, humidity, temperature inversions, and heavy rainfall on herbicide effectiveness and risks. • Apply herbicides in favorable weather conditions to minimize drift. For example, do not treat when winds exceed 10 mph (>6 mph for aerial applications) or rainfall is imminent. • Use drift reduction agents, as appropriate, to reduce the drift hazard. • Select proper application equipment (e.g., spray equipment that produces 200- to 800-micron diameter droplets [spray droplets of 100 microns and less are most prone to drift]). • Select proper application methods (e.g., set maximum spray heights, use appropriate buffer distances between spray sites and non-target resources).
Soil See Manual 7000 (*Soil, Water, and Air Management*)	• Minimize treatments in areas where herbicide runoff is likely, such as steep slopes when heavy rainfall is expected. • Minimize use of herbicides that have high soil mobility, particularly in areas where soil properties increase the potential for mobility. • Do not apply granular herbicides on slopes of more than 15% where there is the possibility of runoff carrying the granules into non-target areas.
Water Resources See Manual 7000 (*Soil, Water, and Air Management*)	• Consider climate, soil type, slope, and vegetation type when developing herbicide treatment programs. • Select herbicide products to minimize impacts to water. This is especially important for application scenarios that involve risk from active ingredients in a particular herbicide, as predicted by risk assessments. • Use local historical weather data to choose the month of treatment. Considering the phenology of the target species, schedule treatments based on the condition of the water body and existing water quality conditions. • Plan to treat between weather fronts (calms) and at appropriate time of day to avoid high winds that increase

TABLE A-3 Vegetation Treatment
Standard Operating Procedures for Applying Herbicides (Contd.)

Resource Element	Standard Operating Procedure
	water movements, and to avoid potential stormwater runoff and water turbidity. • Review hydrogeologic maps of proposed treatment areas. Note depths to groundwater and areas of shallow groundwater and areas of surface water and groundwater interaction. Minimize treating areas with high risk for groundwater contamination. • Conduct mixing and loading operations in an area where an accidental spill would not contaminate an aquatic body. • Do not rinse spray tanks in or near water bodies. Do not broadcast pellets where there is danger of contaminating water supplies. • Maintain buffers between treatment areas and water bodies. Buffer widths should be developed based on herbicide- and site-specific criteria to minimize impacts to water bodies. • Minimize the potential effects to surface water quality and quantity by stabilizing terrestrial areas as quickly as possible following treatment.
Wetlands and Riparian Areas	• Use a selective herbicide and a wick or backpack sprayer. • Use appropriate herbicide-free buffer zones for herbicides not labeled for aquatic use based on risk assessment guidance, with minimum widths of 100 feet for aerial, 25 feet for vehicle, and 10 feet for hand spray applications.
Vegetation See Handbook H-4410-1 (*National Range Handbook*), and manuals 5000 (*Forest Management*) and 9015 (*Integrated Weed Management*)	• Refer to the herbicide label when planning revegetation to ensure that subsequent vegetation would not be injured following application of the herbicide. • Use native or sterile species for revegetation and restoration projects to compete with invasive species until desired vegetation establishes. • Use weed-free feed for horses and pack animals. Use weed-free straw and mulch for revegetation and other activities. • Identify and implement any temporary domestic livestock grazing and/or supplemental feeding restrictions needed to enhance desirable vegetation recovery following treatment. Consider adjustments in the existing grazing permit, to maintain desirable vegetation on the treatment site.
Pollinators	• Complete vegetation treatments seasonally before pollinator foraging plants bloom. • Time vegetation treatments to take place when foraging pollinators are least active both seasonally and daily. • Design vegetation treatment projects so that nectar and pollen sources for important pollinators and resources are treated in patches rather than in one single treatment. • Minimize herbicide application rates. Use typical rather than maximum rates where there are important pollinator resources. • Maintain herbicide free buffer zones around patches of important pollinator nectar and pollen sources. • Maintain herbicide free buffer zones around patches of important pollinator nesting habitat and hibernacula.

TABLE A-3 Vegetation Treatment
Standard Operating Procedures for Applying Herbicides (Contd.)

Resource Element	Standard Operating Procedure
	• Make special note of pollinators that have single host plant species, and minimize herbicide spraying on those plants (if invasive species) and in their habitats.
Wildlife See manuals 6500 (Wildlife and Fisheries Management) and 6780 (Habitat Management Plans)	• Use herbicides of low toxicity to wildlife, where feasible. • Use spot applications or low-boom broadcast operations where possible to limit the probability of contaminating non-target food and water sources, especially non-target vegetation over areas larger than the treatment area. • Use timing restrictions (e.g., do not treat during critical wildlife breeding or staging periods) to minimize impacts to wildlife.
Threatened, Endangered, and Sensitive Species See Manual 6840 (*Special-Status Species*)	• Survey for special-status species before treating an area. Consider effects to special-status species when designing herbicide treatment programs. • Use a selective herbicide and a wick or backpack sprayer to minimize risks to special-status plants. • Avoid treating vegetation during time-sensitive periods (e.g., nesting and migration, sensitive life stages) for special-status species in area to be treated.
Visual Resources See handbooks H-8410-1 (*Visual Resource Inventory*) and H-8431-1 (*Visual Resource Contrast Rating*), and manual 8400 (*Visual Resource Management)*	• Minimize off-site drift and mobility of herbicides (e.g., do not treat when winds exceed 10 mph; minimize treatment in areas where herbicide runoff is likely; establish appropriate buffer widths between treatment areas and residences) to contain visual changes to the intended treatment area. • If the area is a Class I or II visual resource, ensure that the change to the characteristic landscape is low and does not attract attention (Class I), or if seen, does not attract the attention of the casual viewer (Class II). • Lessen visual impacts by: 1) designing projects to blend in with topographic forms; 2) leaving some low-growing trees or planting some low-growing tree seedlings adjacent to the treatment area to screen short-term effects; and 3) revegetating the site following treatment. • When restoring treated areas, design activities to repeat the form, line, color, and texture of the natural landscape character conditions to meet established Visual Resource Management (VRM) objectives.
Wilderness and Other Special Areas See handbooks H-8550-1 (Management of Wilderness Study Areas (WSAs)), and H-8560-1 (Management of Designated Wilderness Study Areas), and Manual 8351 (Wild and Scenic Rivers)	• Use the “minimum tool” to treat noxious and invasive vegetation, relying primarily on the use of ground-based tools, including backpack pumps, hand sprayers, and pumps mounted on pack and saddle stock. • Use chemicals only when they are the minimum method necessary to control weeds that are spreading within the wilderness or threaten lands outside the wilderness. • Give preference to herbicides that have the least impact on non-target species and the wilderness environment. • Implement herbicide treatments during periods of low human use, where feasible. • Address wilderness and special areas in management plans.
Recreation	• Schedule treatments to avoid peak recreational use times, while taking into account the optimum management period for

TABLE A-3 Vegetation Treatment
Standard Operating Procedures for Applying Herbicides (Contd.)

Resource Element	Standard Operating Procedure
See Handbook H-1601-1 (*Land Use Planning Handbook, Appendix C*)	the targeted species. • Adhere to entry restrictions identified on the herbicide product label for public and worker access. • Post signs noting exclusion areas and the duration of exclusion, if necessary. • Use herbicides during periods of low human use, where feasible.
Social and Economic Values	• Post treated areas and specify reentry or rest times, if appropriate. • Notify the public of the project to improve coordination and avoid potential conflicts and safety concerns during implementation of the treatment. • Control public access until potential treatment hazards no longer exist, per herbicide product label instructions. • Observe restricted entry intervals specified by the herbicide product label. • Use spot applications or low-boom broadcast applications where possible to limit the probability of contaminating non-target food and water sources, especially vegetation over areas larger than the treatment area. • To the degree possible within the law, hire local contractors and workers to assist with herbicide application projects and purchase materials and supplies, including chemicals, for herbicide treatment projects through local suppliers.
Rights-of-way	• Coordinate vegetation management activities where joint or multiple use of a right-of-way (ROW) exists. • Use only herbicides that are approved for use in ROW areas.
Human Health and Safety	• Establish a buffer between treatment areas and human residences based on guidance given in the human health risk assessment (HHRA), with a minimum buffer of ¼ mile for aerial applications and 100 feet for ground applications, unless a written waiver is granted. • Use protective equipment as directed by the herbicide product label. • Post treated areas with appropriate signs at common public access areas. • Observe restricted entry intervals specified by the herbicide product label. • Have a copy of MSDSs at work site. • Contain and clean up spills and request help as needed. • Secure containers during transport. • Follow label directions for use and storage. • Dispose of unwanted herbicides promptly and correctly.

A-4 BLM Treatment Measures

The following are additional treatment measures agreed to by San Diego Gas and Electric (SGD&E) to be implemented prior to the use of herbicide treatment on Bureau of Land Management (BLM) administered lands:

- SDG&E has prepared a spill contingency plan which contains prevention measures that address herbicide transportation, mixing and loading, spraying operations, containment, security, spill occurrence procedures and spill kit supplies. The spill contingency plan is included as Appendix A; Table A-4 of the Environmental Assessment (EA). Prior to treatment, BLM will review and approve the plan.

- SDG&E will provide notification to BLM two weeks prior to herbicide application.

- Signage will be posted on existing carsonite signs to adequately demarcate use of herbicides for invasive plant treatment at Impact Areas.

- Notification to adjacent land owners will be provided if treatment occurs within 1,000' of a residence.

- A flat-tailed horned lizard trained biological monitor will conduct clearance surveys prior to herbicide application in areas known to have flat-tailed horned lizard (FTHL) presence.

- Herbicide application would include the use of BLM-approved non-toxic marker dyes as needed to facilitate efficient treatment and reduce the potential for over-application or redundant treatments.

- Consistent with California state law, all crew members applying herbicides will be trained prior to handling or applying herbicide for weed control treatment. Treatment will occur under the direction of a person holding a Pesticide Applicator License valid in the State of California.

- SDG&E would not schedule herbicide application prior to forecasted rain events that have a greater than 10 percent chance of occurring.

- SDG&E will submit reports following completion of a treatment session for the SRPL project as to not inundate BLM with daily or weekly reports.

- SDG&E will prepare an annual summary report of herbicide use and submit it to the BLM.